

36. (New) The method of operating a hard disk drive in accordance with claim 35, wherein:

said system parameter comprises a position offset information corresponding to at least one of said plurality of tracks other than said dedicated track, said position offset information representing a distance between respective centers of said write element and said read element with respect to a direction of travel while said head travels along said at least one of said plurality of tracks.

The applicant has attached an edited version of the claims as an Appendix.

REMARKS

By this amendment, claims 14-16, 18-20 and 22-31 are canceled, claims 13, 17 and 21 are amended, and claims 32-36 are newly added. Thus, claims 1-13, 17, 21, and 32-36 are presently pending in the instant application.

Improper Broadening Rejection of Claims 13-31

The Examiner rejected claims 13-31 under 35 U.S.C. §251 as improperly broadening the patent application. Section 251 allows a patentee to broaden a claim within two years of the issue date. The patent which is the basis for the above-entitled application issued on February 2, 1999. The reissue application has a filing date of January 18, 2001, which is within two years of the issued date. The applicant therefore submits that the above-entitled application may contain broadened claims per section 251.

Recapture Rejection of Claims 13 and 17

The Examiner rejected claims 13 and 17 under 35 U.S.C. §251 as being an improper recapture. Applicant respectfully traverses this rejection.

The Examiner asserts that “[a] the broadening aspect is present in the re-issue which was not present in the application for patent.” And goes on to state that the “record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during prosecution of the application.” See Office Action, Page 2.

It is respectfully submitted that the above two statements by the Examiner are directly at odds with each other. How could the Applicant “surrender” a subject matter when a claimed directed thereto was not presented during the prosecution of the original patent? A claim having the same scope as the invention now recited by claims 13 and 17 was not presented for examination during the prosecution of the original patent. The applicant could not, contrary to the Examiner’s assertion, find anything in the prosecution record of the original patent that points to a surrender of the subject matter of claims 13 and 17.

35 USC §251 specifically and expressly allows a reissue of a patent when the patentee without any deceptive intent claimed “more or less” than he had a right to claim. Accordingly, it is submitted that claiming, without deceptive intent, by the present Applicant, less than the Applicant was entitled, by inadvertently failing to present a claim an aspect of the present invention, is within the meaning of the statute, an error correctable through a re-issue application. Moreover, this error cannot be the basis for a recapture rejection as otherwise the statute would be wholly inoperative.

Accordingly, it is respectfully requested that the rejection be withdrawn.

Objection to the Specification

The Examiner objected to the disclosure because some of the reference numbers in Figure 4 do not correspond with the specification. The application has amended the specification herein to correct this informality. Accordingly, withdrawal of the rejection is respectfully requested.

New Matter Rejection of Claims 14-16, 18-20, 30 and [34] 31¹

The Examiner rejected claims 14-16, 18-20, 30 and 31 under 35 U.S.C. §251 as adding new matter. Each of the rejected claims 14-16, 18-20, 30 and 31 is canceled herein, rendering the rejection moot. Accordingly, withdrawal of the rejection is respectfully requested.

Rejection of Claims 14-16, 18-20, 30 and [34] 31 under 35 U.S.C. §112, 1st paragraph

The Examiner rejected claims 14-16, 18-20, 30 and 31 under 35 U.S.C. §112, first paragraph. Each of the rejected claims 14-16, 18-20, 30 and 31 is canceled herein, rendering the rejection moot. Accordingly, withdrawal of the rejection is respectfully requested.

¹ The present application was originally filed with a total of 31 claims. However, the last two claims were inadvertently erroneously numbered respectively as claims 29 and 34, where the claims should have been numbered 30 and 31, respectively. It is thus presumed that when the Examiner refers to claim 34, that he is referring to claim 31 as properly numbered.

Alleged Anticipation of claims 13-21 and 22-31 by Smith

The Examiner rejected claims 13-21 and 22-31 under 35 U.S.C. §102(e) as being anticipated by US Patent 5,500,776 to Smith ("Smith"). To anticipate a claim all of the limitations of the claim must be expressly or inherently found in the four corners of the reference.

Claims 14-16, 18-20, 30 and 31 are canceled herein, rendering the rejection moot with respect to those claims.

Each of the independent claims 13, 17 and 21 recite, as amended, *inter alia*, storage of the system parameters of a hard disk drive along the track centerline of a dedicated track, which is to be read first upon powering up of the drive. For example, claim 1 recites a disk that has a "plurality of tracks including a dedicated track intended to be read first before any other ones of said plurality of tracks upon powering up of said hard disk drive, said dedicated track having stored thereon one or more **system parameters in alignment with the track centerline of said dedicated track.**"

As explained in the specification of the present application, system parameters, e.g., the read/write channel parameters, or the like, are typically stored on a dedicated track, often referred to as the "maintenance track", and are read first upon the powering up of the drive for use during the operation of the drive. In a conventional disk, because the system parameters are written while the read element is centered along the track centerline of the dedicated track, the system parameters end up being written off the track center by the amount of the offset between the read element and the write element. Thus, in a conventional disk, after powering up, before the dedicated track can be read, the offset between the elements at least for the dedicated track, i.e., when the MR head is traversing

along the dedicated track, must be known or measured. Once the offset is made known, the center of the read element is moved to be aligned with the center of the system parameters, i.e., off the track centerline of the dedicated track. See Col. 2, lines 12-19.

An aspect of the present invention, which each of claims 13, 17 and 21 recite, is directed to the storage of the system parameters in alignment with the track centerline of the dedicated track. Since the system parameters are already in alignment with the track centerline of the dedicated track, upon power up, the read element, once centered on the track centerline by reading the servo bursts, e.g., the A, B, C, D bursts, read the system parameters without having to again move by the amount of the offset between the elements. See Col. 7, lines 14-37.

Smith is wholly silent as to the storage of the system parameters, much less storage thereof along the track centerline of the dedicated track. Smith discloses a “self-calibration” of the read/write offset, in which the bursts 111 and 112 stored in various data tracks are used to measure the offset(s) along the tracks. The bursts could be written in a rewriteable “scratch pad” during operation to maintain the accuracy of the measurement of the offset(s) over the life of the disk drive. See Col. 2, lines 61+ of Smith. Smith, however, offers absolutely no disclosure of how and where to read the system parameters upon powering up of the drive. It is not to say that the self calibration methods may not be used in a system implementing the system parameter storage aspect of the present invention as recited by claims 13, 17 and 21 of the present application. Rather, what Smith discloses and the subject matter of claims 13, 17 and 21 are directed to two very different aspects of an operation of a disk drive.

For at least the above reasons, Smith does not anticipate claims 13, 17 and 21. Accordingly, it is respectfully requested that the rejection be withdrawn.

Alleged Anticipation of claims 15, 17 and 21-31 by Valent

The Examiner rejected claims 15, 17 and 21-31 under 35 U.S.C. §102(e) as being anticipated by Valent.

Claims 15 and 22-31 are canceled herein, rendering the rejection moot with respect to those claims.

As already explained, independent claims 17 and 21 recite, as amended, *inter alia*, storage of the system parameters of a hard disk drive along the track centerline of a dedicated track.

While Valent appears to disclose addition of servo bits **at different distances from the track centerline** to center the head, (see Abstract), Valent is wholly silent as to the storage of system parameters.

It is submitted that Valent does not anticipate claims 17 and 21. Accordingly, it is respectfully requested that the rejection be withdrawn.

New Claims

By this amendment, new claims 32-36 are added. No new matter is added. The support for the newly presented claims can be found in the present specification, e.g., Figs 9A-10B and Col. 7, lines 14+.

Claims 32-34 each depend from claims 13, 17 and 21, respectively, and thus are allowable for at least the reasons above with respect to claims 13, 17 and 21.

Claim 35 and 36 are directed to the method of reading the system parameters upon powering up of the drive as shown in Figs. 10A and 10B, recites, *inter alia*, “reading system parameters from said dedicated track while said read element is aligned with said centerline of said dedicated track before reading any other ones of said plurality of tracks.”

As explained above, neither of Smith and Valent offer any particular ways in which the system parameters are read upon powering up of the drive. It is thus submitted that claims 35 and 36 are allowable over prior art of record.

Allowable Subject Matter

The Applicant acknowledges with appreciation the indication by the Examiner that claims 1-12 are allowable.

IDS

The applicant had submitted an IDS on September 28, 2002. The Examiner has not provided an initialized IDS indicating receipt of the references. The applicant requests a status of the IDS.

Conclusion

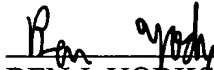
For at least above reasons, the Applicant believes that all currently pending claims are patentably distinct from prior art of record, and that thus the present application in condition for allowance. An early notice to that effect is earnestly solicited. The Applicant respectfully requests that the Examiner extend the applicant a courtesy of calling the undersigned, before an issuance of further office action in this application, to schedule

a personal interview, and to grant the same in order to expedite the prosecution of the instant application.

Respectfully submitted,
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Dated: May 20, 2003


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Wendy Jones
Date 5/20/03